THE DENTITION OF THE PUPIDE.

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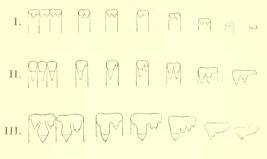
I am able to confirm Dr. Sterki's interesting discovery (Nantilus, vol. x, pp. 75-6) that Vertigo edentula, Drap., has the dentition of Punctum. I can add that it is the same with Vertigo simplex, Gld., if it be a distinct species. Dr. Sterki revives for these the generic name of Sphyradium.

The rest, however, of my Pupidæ are quite different. They are of

two types—

(A) Central tooth uni- to bicuspid. Laterals bicuspid, inner cusp large. Outer teeth broad, multicuspid, inner cusp largest.

(B) Central tooth and laterals unicuspid, base longer than in A. Outer teeth bieuspid, occasionally approximating to the A type.



Series of teeth in radula of:

I. Sphyradium edentulum, Drap.

II. Pupa megacheilos, Jan.

III. Pupa dolium, Drap.

The list will stand thus:-

To A belong—Pupa affinis, Rossm.; anconostoma, Lowe; armifera, Say; avenacea, Brug.; Braunii, Rossm.; Californica, Rve.; cinerea, Drap.; clausilioides, Bonb.; contracta, Say; corticaria, Say; cylindracea, Da C.; dolium, Drap.; Eyriesi, Drouet; fallax, Say; frumentum, Drap.; Hunana, Gredl.; marginata, Drap.; milium, Gld.; Montserratica, Fagot; Mühlfeldtii, Küster; nana, [?]; pachygastra, Ziegl.; Pacifica, Pfr.; Partioti, Moq.-Tand.; procera, Gld.; Rhodia, Roth; ringens, Jeffr.; rugosula, Sterki; rupicola, Say; secalina, Marts.; Semproni, Charp.;

umbilicata, Drap.; unicolor [?]; variabilis. Drap.; Vertigo alpestris, Ald.; augustior, Jeffr.; antivertigo, Drap.; Bollesiana, Morse; Paradesii, D'Orb.; Rossiteri, Braz.; tridentata, Wolf.

These are forty-one species in all, representing Europe, North

America, Turkestan, Peru, China, and Australia.

To B belong—Pupa Algesiræ, Kob.; amicta, Parr.; arenacea, Brug.; Bergomensis, Charp.; Biyorrensis, Charp.; Calpica, Westerl.; megacheilos, Jan.; quinquedentata, Born; scalaris, Benoit; secale, Drap.; similis, Brug.

Eleven species of *Pupa*, all of them Mediterranean, except those of *P. arenacea*, Brug., and *P. secale*, Drap., range northward. The most typical of them are *Algesivæ*, Kob.; *amicta*, Parr.; and *megacheilos*,

Jan.; which are strictly Mediterranean.